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Abstract

THE FUNCTIONING OF THE REACTORS GE - G3 AT MARCOULE AND EDF 1

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After resuming briefly the characteristics of the installations G2-G3 at MARCOULE and EDF 1 at CHINON, the authors review the main aspects of the tests, the starting and the exploitation of these reactors.

Among the various points examined, particular emphasis is given to the devices of original nature such as tubular fuel elements, flattening of the neutron flux by stuffing, behaviour of the reactor tanks and the cooling circuits, the blowers, unloading devices, regulation and functioning of the informations.

This analysis deals equally with the performances obtained and the difficulties and the various incidents experienced during the initial starting period. Among the more interesting results, the progressive increase in the power of the MARCOULE reactors is mentionned, obtained through a better knowledge of the parameters covering the functioning of the reactors such as the distribution of the flux and the temperatures etc ... acquired during the course of the exploitation of the reactor.

The conclusion reached by the authors is that the experience gained on these installations has shown :

- that during an initial period, adjustements became necessary, all of which turned out to be possible.
- that an analysis of their functioning has permitted the progressive movement towards a truly industrial exploitation.

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